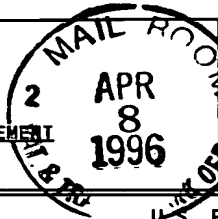


FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
448.0120002APPLICATION NO.  
08/549,318APPLICANTS  
AMMS et al.FILING DATE  
October 27, 1995GROUP  
(To Be Assigned)

1201

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
AA1	4,261,868	04/14/81	Hora et al.	252	529	08/08/79
AB1	4,369,183	01/18/83	Jones et al.	424	263	02/02/81
AC1	4,499,082	02/12/85	Shenvi et al.	514	2	12/05/83
AD1	4,510,130	04/09/85	Platt et al.	514	2	05/20/83
AE1	4,537,707	08/27/85	Severson, Jr.	252	545	05/14/84
AF1	4,537,773	08/27/85	Shenvi, A.B.	514	63	12/05/83
AG1	4,842,769	06/27/89	Shulman et al.	252	8.6	09/02/87
AH1	4,963,655	10/16/90	Kinder et al.	530	331	05/27/88
AI1	4,997,929	03/05/91	Collins et al.	536	27	09/08/89
AJ1	5,030,378	07/09/91	Venegas, M.G.	252	174.12	08/06/90
AK1	5,106,948	04/21/92	Kinder et al.	530	331	08/28/90

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
AL1	EP 0 145 441	06/19/85	Europe			Yes No
AM1	EP 0 293 881	12/07/88	Europe			Yes No
AN1	WO 88/10266	12/29/88	PCT			Yes No
AO1	EP 0 315 574	05/10/89	Europe			Yes X No
AP1	EO 0 354 522	02/14/90	Europe			Yes X No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AR	1	Aoyagi, T., and Umezawa, H., "Structures and Activities of Protease Inhibitors of Microbial Origin," in: <i>Proteases and Biological Control</i> , vol. 2, Reich, E., et al., eds., Cold Spring Harbor, NY: Cold Spring Harbor Laboratory Press, pp. 429-454 (1975).
AS	1	Bachovin, W.W., et al., "Nitrogen-15 NMR Spectroscopy of the Catalytic-Triad Histidine of a Serine Protease in peptide Boronic Acid Inhibitor Complexes," <i>Biochemistry</i> 27:7689-7697 (1988).
AT	1	Berry, S.C., et al., "Interaction of Peptide Boronic Acids With Elastase: Circular Dichroism Studies," <i>Proteins: Structure, Function, and Genetics</i> 4:205-210 (1988).

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DATE CONSIDERED

4-28-97

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FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT				ATTY. DOCKET NO. 1448.0120002		APPLICATION NO. 08/549,318	
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	AA2	5,169,841	12/08/92	Kleeman et al.	514	63	11/03/88
	AB2	5,187,457	02/16/93	Kettner et al.	514	18	04/06/88
	AC2	5,242,904	09/07/93	Kettner et al.	514	18	03/09/92
	AD2	5,250,720	10/05/93	Kettner et al.	558	288	03/09/92
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	AN2	EP 0 364 344	04/18/90	Europe			Yes No
	AO2	EP 0 381 262	08/08/90	Europe			Yes No
	AP2	EP 0 393 457	10/24/90	Europe			Yes No
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)							
	AR	2	Castro, B., et al., "Peptide Coupling Reagents VI. A Novel, Cheaper Preparation of Benzotriazolyloxytris(dimethylamino)phosphonium Hexafluorophosphate (BOP Reagent)," <i>Synthesis</i> 11:751-752 (1976).				
	AS	2	Dick, L.R., et al., "Degradation of Oxidized Insulin B Chain by the Multiproteinase Complex Macropain (Proteasome)," <i>Biochemistry</i> 30:2725-2734 (1991).				
	AT	2	Goldberg, A.L., "The Mechanism and Functions of ATP-Dependent Proteases in Bacterial and Animal Cells," <i>Eur. J. Biochem.</i> 203:9-23 (1992).				
EXAMINER					DATE CONSIDERED		
<i>Ramsuer</i>					4-28-97		
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				GROUP (To Be Assigned) 1201			

U.S. PATENT DOCUMENTS							
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	AN3	EP 0 478 050	04/01/92	Europe			Yes No
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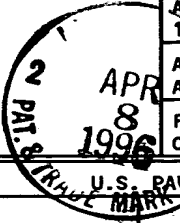
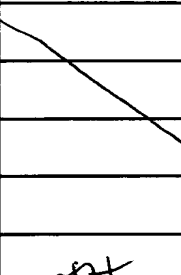




  

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
	AR	3	Goldberg, A.L., and Rock, K.L., "Proteolysis, Proteasomes and Antigen Presentation," <i>Nature</i> 357:375-379 (1992).
	AS	3	Hershko, A., and Ciechanover, A., "The Ubiquitin System for Protein Degradation," <i>Annu. Rev. Biochem.</i> 61:761-807 (1992).
	AT	3	Kettner, C.A., and Shenvi, A.B., "Inhibition of the Serine Proteases Leukocyte Elastase, Pancreatic Elastase, Cathepsin G, and Chymotrypsin by Peptide Boronic Acids," <i>J. Biol. Chem.</i> 259(24):15106-15114 (1984).

EXAMINER <div style="text-align: center; font-family: cursive; font-size: 1.2em;">Ramsuer</div>	DATE CONSIDERED 4-28-97
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FORM PTO-1449 <b>INFORMATION DISCLOSURE STATEMENT</b>				ATTY. DOCKET NO. 1448.0120002		APPLICATION NO. 08/549,318	
				APPLICANTS ADAMS et al.		GROUP (To Be Assigned) 1201	
				FILING DATE October 27, 1995			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
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FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL4	WO 92/12140	07/23/92	PCT			Yes No
	AM4	EP 0 511 456	11/04/92	Europe			Yes No
	AN4	WO 92/19707	11/12/92	PCT			Yes No
	AO4	WO 92/19709	11/12/92	PCT			Yes No
	AP4	WO 93/21213	10/28/93	PCT			Yes No
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)							
	AR	4	Kettner, C.A., et al., "Kinetic Properties of the Binding of $\alpha$ -Lytic Protease to Peptide Boronic Acids," <i>Biochemistry</i> 27:7682-7688 (1988).				
	AS	4	Kinder, D.H., and Katzenellenbogen, J.A., "Acylamino Boronic Acids and Difluoroborane Analogues of Amino Acids: Potent Inhibitors of Chymotrypsin and Elastase," <i>J. Med. Chem.</i> 28:1917-1925 (1985).				
	AT	4	Kinder, D.H., et al., "Antimetastatic Activity of Boro-Amino Acid Analog Protease Inhibitors against B16BL6 Melanoma in vivo," <i>Invasion Metastasis</i> 12:309-319 (1992).				
EXAMINER					DATE CONSIDERED		
					4-28-97		
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FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT				ATTY. DOCKET NO. 1448.0120002		APPLICATION NO. 08/549,318	
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				GROUP (To Be Assigned) 1201			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
<i>JA</i>	AL5	WO 93/21214	10/28/93	PCT			Yes No
	AM5	EP 0 583 536	02/23/94	Europe			Yes No
	AN5	WO 94/21668	09/29/94	PCT			Yes No
	AO5	WO 94/23045	10/13/94	PCT			X Yes No
	AP5	95/09858	04/13/95	PCT			Yes No
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)							
	AR	2	Li, X., et al., "Isolation and Characterization of a Novel Endogenous Inhibitor of the Proteasome," <i>Biochemistry</i> 30:9709-9715 (1991).				
<i>JA</i>	AS	2	Lim, M.S.L., et al., "The Solution Conformation of (D)Phe-Pro-Containing Peptides: Implications on the Activity of Ac-(D)Phe-Pro-boroArg-OH, a Potent Thrombin Inhibitor," <i>J. Med. Chem.</i> 36(13):1831-1838 (June 25, 1993).				
<i>JA</i>	AT	2	Matteson, D.S., et al., "(R)-1-Acetamido-2-phenylethaneboronic Acid. A Specific Transition-State Analogue for Chymotrypsin," <i>J. Am. Chem. Soc.</i> 103:5241-5242 (1981).				
EXAMINER <i>Ramona</i>					DATE CONSIDERED 4-28-95		
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.							

FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1A38.0120002APPLICATION NO.  
08/549,318APPLICANTS  
ADAMS et al.FILING DATE  
October 27, 1995GROUP  
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## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	6	Murakami, K., and Etlinger, J.D., "Endogenous Inhibitor of Nonlysosomal High Molecular Weight Protease and Calcium-Dependent Protease," <i>Proc. Natl. Acad. Sci. USA</i> 83:7588-7592 (1986).
	AS	6	Rechsteiner, M., "Ubiquitin-Mediated Pathways for Intracellular Proteolysis," <i>Ann. Rev. Cell Biol.</i> 3:1-30 (1987).
	AT	6	Rivett, A.J., "The Multicatalytic Proteinase. Multiple Proteolytic Activities," <i>J. Biol. Chem.</i> 264(21):12215-12219 (1989).

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DATE CONSIDERED

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APPLICANTS ADAMS et al.				FILING DATE October 27, 1995		GROUP (To Be Assigned) 1201	

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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
/	AR	Z	Rivett, A.J., "The Multicatalytic Proteinase of Mammalian Cells," <i>Arch. Biochem. Biophys.</i> 268(1):1-8 (1989).
/	AS	Z	Rock, K.L., et al., "Inhibitors of the Proteasome Block the Degradation of Most Cell Proteins and the Generation of Peptides Presented on MHC Class I Molecules," <i>Cell</i> 78:761-771 (September 9, 1994).
/	AT	Z	Sheehan, J.C., et al., "A Rapid Synthesis of Oligopeptide Derivatives Without Isolation of Intermediates," <i>J. Am. Chem. Soc.</i> 87(11):2492-2493 (1965).

EXAMINER 	DATE CONSIDERED 4-28-97
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				GROUP (To Be Assigned) 1701			

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	AM						Yes No
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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
	AR	8	Takahashi, L.H., et al., "Crystallographic Analysis of the Inhibition of Porcine Pancreatic Elastase by a Peptidyl Boronic Acid: Structure of a Reaction Intermediate," <i>Biochemistry</i> 28:7610-7617 (1989).
	AS	8	Tanaka, K., et al., "Proteasomes: Protein and Gene Structures," <i>New Biol.</i> 4(3):173-187 (1992).
	AT	8	Tsai, D.J.S., et al., "Diastereoselection in Reactions of Pinanediol Dichloromethaneboronate," <i>Organometallics</i> 2:1543-1545 (1983).

EXAMINER	DATE CONSIDERED 4-28-97
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FORM PTO-1449 <b>INFORMATION DISCLOSURE STATEMENT</b>	ATTY. DOCKET NO. 1448.0120002	APPLICATION NO. 08/549,318
APPLICANTS ADAMS et al.		
FILING DATE October 27, 1995		GROUP (To Be Assigned) <b>1201</b>

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	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
<b>SH</b>	AR	2	Tsilikounas, E., et al., "Identification of Serine and Histidine Adducts in Complexes of Trypsin and Trypsinogen with peptide and Nonpeptide Boronic Acid Inhibitors by <sup>1</sup> H NMR Spectroscopy," <i>Biochemistry</i> 31:12839-12846 (1992).
<b>SH</b>	AS	2	Veale, C.A., et al., "Nonpeptidic Inhibitors of Human Leukocyte Elastase. 5. Design, Synthesis, and X-ray Crystallography of a Series of Orally Active 5-Aminopyrimidin-6-one-Containing Trifluoromethyl Ketones," <i>J. Med. Chem.</i> 38(1):98-108 (January 6, 1995).
	AT	2	

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